



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------|-------------|----------------------|---------------------|------------------|
| 10/507,453 | 09/13/2004 | Gerd Reime | REP-0027 | 1401 |
| 23413 | 7590 | 04/18/2006 | | EXAMINER |
| CANTOR COLBURN, LLP | | | | DOAN, JENNIFER |
| 55 GRIFFIN ROAD SOUTH | | | ART UNIT | PAPER NUMBER |
| BLOOMFIELD, CT 06002 | | | | 2874 |

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

| | | |
|------------------------------|-----------------|--------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/507,453 | REIME ET AL. |
| | Examiner | Art Unit |
| | Jennifer Doan | 2874 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 13 September 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 26-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 26-29,34,36 and 40-50 is/are rejected.
- 7) Claim(s) 30-33,35 and 37-39 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 13 September 2004 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 091304.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The prior art documents submitted by applicant in the Information Disclosure Statement filed on 09/13/04, have all been considered and made of record (note the attached copy of form PTO-1449).

Drawings

3. The drawings, filed on 09/13/04, are accepted.

Specification

4. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 26-29, 34, 36 and 40-50 are rejected under 35 U.S.C. 102(e) as being anticipated by Reime (U.S. 2003/0020004).

With respect to claims 26, 42 and 43, Reime (figure 9) discloses a method and a device for optoelectronically detecting movement and/or position of an object comprising at least one transmitting element (1'') for emitting radiation in the optical wavelength range and at least one receiving element (2'') for receiving at least a part of the radiation emitted by the transmitting element and reflected back by the object and also comprising an optical guide (130) arranged in the beam path between the transmitting element and the receiving element, wherein the optical guide (130) comprises at least one light coupling element for coupling-in the radiation previously radiated through the optical guide and diffusely scattered at the object; wherein the radiation is light (see paragraphs [0012], [0080] and [0081]).

With respect to claims 27 and 44, Reime discloses a method and a device, wherein the at least one light coupling element couples into the optical guide the light scattered by the object transversely to the longitudinal extent of the optical guide (see paragraph [0081]).

With respect to claims 28 and 45, Reime (figure 9) discloses a method and a device, wherein the radiation radiated through the optical guide (130) by the transmitting element (1'') is radiated transversely through the optical guide from the side opposite the object (see paragraph [0081]).

With respect to claims 29 and 46, Reime (figure 9) discloses a method and a device, wherein radiation emitted along the optical guide by the transmitting element is at least partially coupled-out of the optical guide by the at least one light coupling element before it is scattered by the object (see paragraph [0081]).

With respect to claims 34 and 47, Reime (figure 1) discloses a method and a device, wherein a compensating device for compensating for extraneous light comprises a clock pulse generator (13) for controlling the multiplexing of a plurality of transmitting elements (1, 3) which emit radiation into a plurality of radiation measuring sections (132), and also a synchronous demodulator (5) which is controlled by the clock pulse generator (13) for associating the detected signal in the form of a measured value with the individual measuring sections, and in that, in dependence on the detected values, at least one compensating LED emits light for compensating the extraneous light (see paragraphs [0044] and [0045]).

With respect to claims 36 and 48, Reime discloses a method and a device, wherein the at least one compensating LED is formed by one of the transmitting elements (see paragraph [0043], lines 1-2).

With respect to claims 40 and 49, Reime (figure 1) discloses a method and a device, wherein signals derived by the at least one receiving element (2) are used as input for a writing recognition system (see paragraphs [0037] and [0038]).

With respect to claims 41 and 50, Reime (figure 1) discloses a method and a device, wherein the at least one transmitting element (1) remains illuminated after a key associated therewith is actuated (see claim 1).

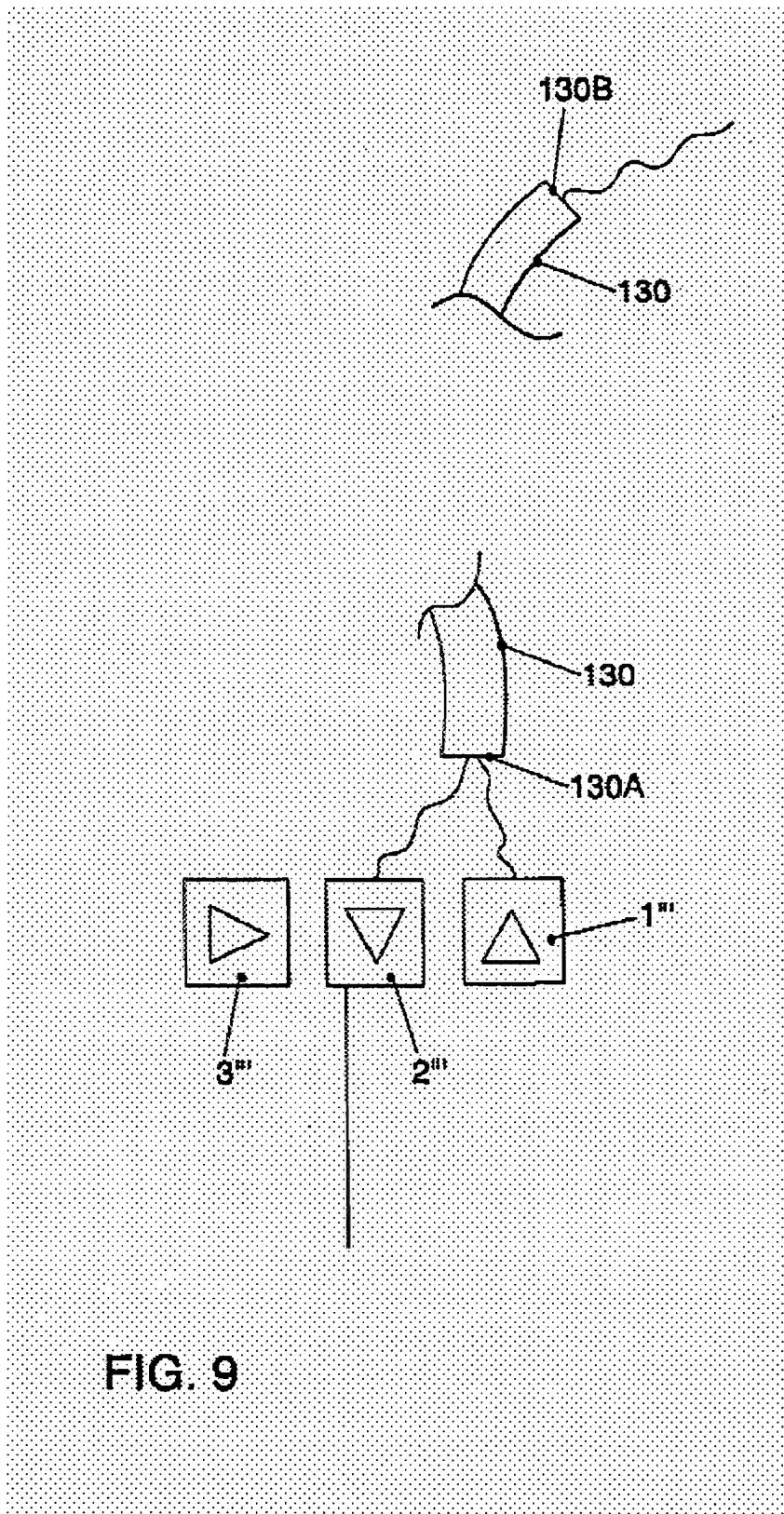


FIG. 9

Allowable Subject Matter

7. Claims 30-33, 35 and 37-39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art fails to disclose or reasonably suggest a method and a device, wherein the at least one light coupling element is a forming at the side of the optical guide facing away from the object transversely approaching the optical guide as recited in claim 30; wherein the optical guide comprises a plurality of light coupling elements which are spatially associated with a respective transmitting element as recited in claim 31; wherein the transmitting elements are arranged in the form of a keyboard and in that a curved or circular-segment-shaped light coupling element is associated with each key as recited in claim 32; wherein the at least one light coupling element only partially penetrate into the optical guide as recited in claim 33; wherein the at least one compensating LED is arranged at the edge of the optical guide as recited in claim 35; wherein the at least one transmitting element and/or the at least one receiving element are arranged at the edge of the optical guide spaced from the light coupling element as recited in claim 37; wherein a plurality of light coupling elements is arranged in the form of a matrix as recited in claim 38 and further wherein a plurality of light coupling elements is arranged in the form of a circle as recited in claim 39.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Doan whose telephone number is (571) 272-2346. The examiner can normally be reached on Monday to Thursday from 6:00 am to 3:30 pm, second Friday off.
9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.
10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JD

Jennifer Doan
JENNIFER DOAN
PRIMARY EXAMINER

April 14, 2006